

# STATE OF MONTANA PRIORITY PRIMARY ROUTE STUDY

( DATA AS OF DECEMBER 31, 1973 )

PREPARED BY  
MONTANA DEPARTMENT OF HIGHWAYS  
IN COOPERATION WITH THE  
U. S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

IN ACCORDANCE WITH  
SECTION 147, TITLE 23, U.S. CODE HIGHWAYS

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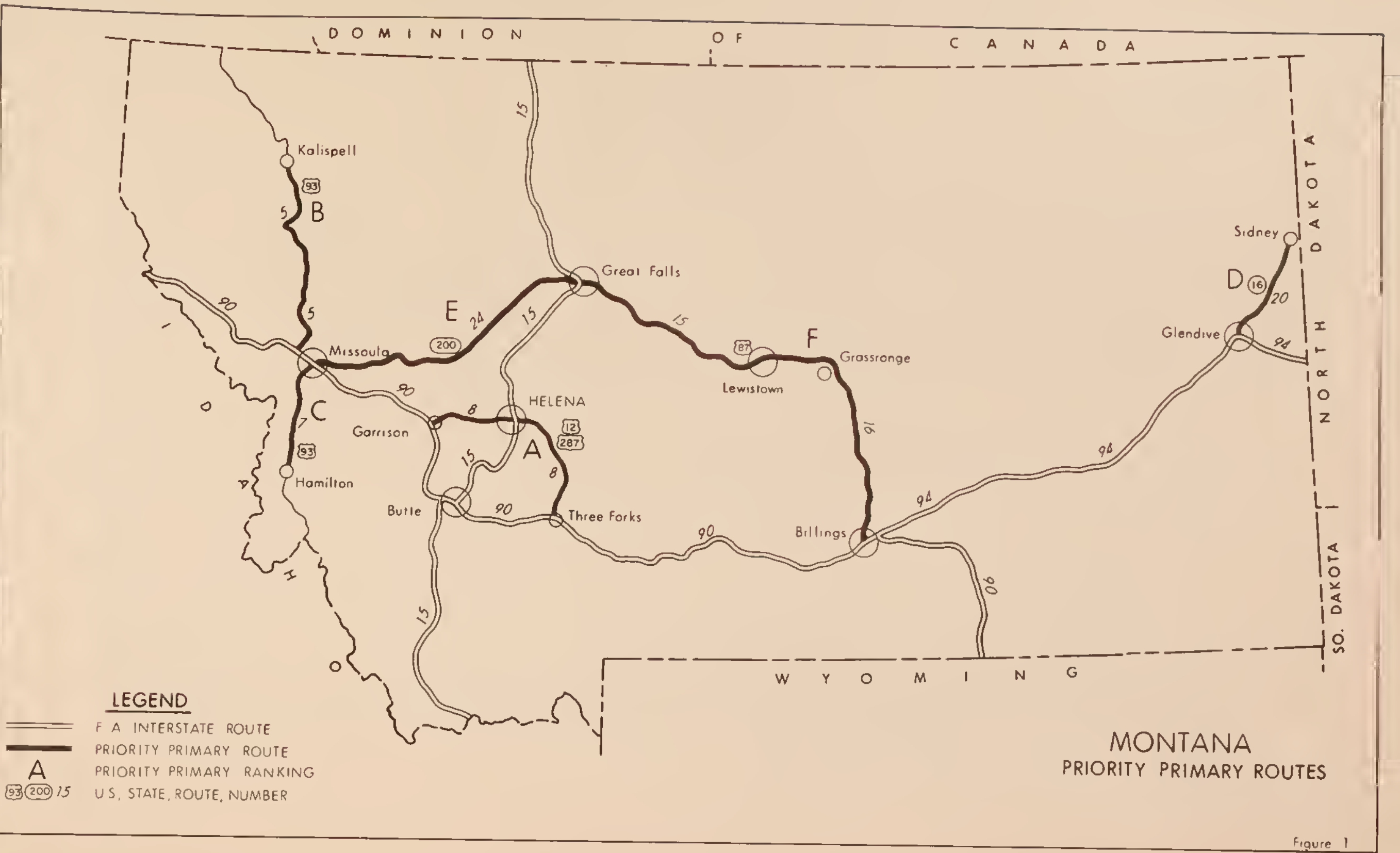


Figure 1



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**Table A**  
**Priority Primary Route Descriptions**

OMB No. 04-R-5652  
Sheet 1 of 1 Sheets

STATE OF MONTANA

Route Identification Letter & Number(s)					Route Description	Length, Miles
Route Letter	Federal-Aid Route No.	Designated				
		U.S.	State	County		
A	8	12			U. S. 12 from Jct I-90 at Garrison to Jct I-90 at Three Forks	108.0 <i>8</i>
B	5	93			U. S. 93 from Jct I-90 at DeSmet to Jct U. S. 2 in Kalispell	112.0
C	7	93			U. S. 93 from Jct FAS 269 in Hamilton to Jct I-90 in Missoula	<u>47.6</u> <i>26.4</i> <i>267.6</i>
D	20		16		Montana 16 from Jct I-94 at Glendive to Jct Montana 200 in Sidney	51.5
E	24		200		Montana 200 from Jct I-90 Bonner Interchange to Jct I-15 at Vaughn	146.0
F	15 & 16	87			Jct I-15 in Great Falls to Jct I-90 in Billings	232.0
Total						<i>699.27</i>

\* In excess of 5% mileage



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 1 of 3 SheetsSTATE MONTANAFAP Route No. 8Designated Route No. US 12  
(U.S. State or County)Route Letter ARoute Priority Ranking 01

Item	Estimate Sections								
	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9
Condition Code and Construction Schedule	2	3	2	1	1	2	2	2	3
Section Length, miles (0.1)	4.1	7.3	11.9	2.4	1.7	1.0	5.3	1.1	2.8
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R	R	R	R	S	S
Urban Area I.D. (Name and Code)								Helena 0590	0590
No. of Lanes (Existing - Ultimate)	2-2	2-2	2-2	4-4	4-4	2-4	2-4	2-4	4-4
Median (Existing - Ultimate)	U-U	U-U	U-U	U-U	U-U	U-U	U-D	U-D	D-D
Degree of Access Control (Existing - Ultimate)	N-N	N-N	N-N	N-N	N-N	N-P	N-P	N-P	N-N
Accident Data (Injuries - Fatalities)	4-0	6-0	12-3	0-0	0-0	8-0	6-0	1-0	9-2
Traffic - a. Base Year (1972)	1,100	1,400	1,300	1,400	1,400	1,400	1,800	2,000	8,200
b. ADT Estimate Design Year (1995)	2,400	2,900	2,900	3,100	3,100	3,100	4,100	4,500	18,100
c. DHV Estimate Design Year (1995)	310	380	380	400	400	400	530	590	1,810
d. D Directional Distribution Factors	55	55	55	55	55	55	55	60	60
e. T Percent Trucks (DHV)	10	10	10	10	10	10	10	10	02
f. V/C Ratio (0.00)	0.15	0.15	0.19	0.05	0.06	0.27	0.23	0.17	0.66
Work Classification	Estimated Cost (1,000 Dollars)								
1. Preliminary Engineering		24							78
2. Right-of-way									
a. Acquisition	35		92			79	270	55	9
b. Relocation									
3. Grade & drain; minor structures	589	11	817						
4. Subbase, base, surfacing, shoulders	380	213	667			3,062	1,730	364	489
5. Interchanges						1,226	770	303	
6. Major Structures over 500'									
7. All other major structures			224				156		
8. All other items	92	22	263						
9. Subtotal, lines 3 to 8	1,061	246	1,991			344	109	73	
10. Construction Engr. & contingencies 10% of Line 9	106	25	199			4,632	2,851	740	489
11. Total cost of construction Lines 9 and 10	1,167	271	2,190			463	285	14	49
12. Total Estimate cost, Lines 1, 2 and 11	1,202	295	2,282			5,095	3,136	814	538
						5,174	3,406	869	625



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 2 of 3 SheetsSTATE MONTANAFAP Route No. 8Designated Route No. US 12  
(U.S. State or County)Route Letter ARoute Priority Ranking 01

Item	Estimate Sections								
	A-10	A-11	A-12	A-13	A-14	A-15	A-16	A-17	A-18
Condition Code and Construction Schedule	3	3	2	2	2	2	3	3	3
Section Length, miles (0.1)	1.1	1.6	0.5	2.0	1.2	3.4	2.7	9.4	11.5
Class: Rural, Small Urban or Urbanized (R, S, U)	S	S	S	R	R	R	R	R	R
Urban Area I.D. (Name and Code)	0590	0590	Helena 0590						
No. of Lanes (Existing - Ultimate)	4-4	4-4	2-4	2-4	2-4	2-2	2-2	2-2	2-2
Median (Existing - Ultimate)	U-U	D-D	U-D	U-D	U-D	U-U	U-U	U-U	U-U
Degree of Access Control (Existing - Ultimate)	N-N	N-N	N-N	N-P	N-N	N-N	N-N	N-N	N-N
Accident Data (Injuries - Fatalities)	3-0	11-0	1-1	4-1	3-0	5-0	1-0	1-5	13-5
Traffic - a. Base Year (1972)	15,400	7,600	5,000	5,400	6,500	2,700	2,300	1,200	1,800
b. ADT Estimate Design Year (1995)	15,700	12,000	11,000	12,000	14,300	5,900	5,100	3,900	3,900
c. DHV Estimate Design Year (1995)	1,600	1,200	1,100	1,440	2,280	940	820	510	510
d. D Directional Distribution Factors	60	60	60	55	55	55	55	55	55
e. T Percent Trucks (DHV)	02	02	05	10	04	04	04	07	07
f. V/C Ratio (0.00)	0.50	0.13	0.16	0.59	0.50	0.33	0.20	0.14	0.14
Work Classification	Estimated Cost (1,000 Dollars)								
1. Preliminary Engineering	15	27	12	111	79		96	35	157
2. Right-of-way									
a. Acquisition	9	45	20	69		68	77	0	0
b. Relocation					69				
3. Grade & drain; minor structures	67	339	140	685	419	960	597	14	17
4. Subbase, base, surfacing, shoulders	250	354	147	435	437	439	469	293	330
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures				488	90				
8. All other items	66	68	41	129	47	107	109	29	33
9. Subtotal, lines 3 to 8	383	761	336	1,767	993	1,526	1,175	336	1,064
10. Construction Engr. & contingencies 10% of Line 9	38	76	34	179	99	153	117	34	106
11. Total cost of construction Lines 9 and 10	421	837	370	1,966	1,092	1,679	1,292	370	1,170
12. Total Estimate cost, Lines 1, 2 and 11	445	909	402	2,146	1,240	1,747	1,465	405	1,327



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 3 of 3 SheetsState MONTANAFAP Route No. 8Designated Route No. US 12  
(U.S. State or County)Route Letter ARoute Priority Ranking 01

Item	Estimate Sections					Subtotal			Total for Route
	A-19	A-20	A-21	A-22		Rural	Small Urban	Urbanized	
Condition Code and Construction Schedule	3	3	3	3					
Section Length, miles (0.1)	1.1	9.7	11.3	8.9					
Class Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R		101.1	7.1	0.0	108.0
Urban Area I, D. (Name and Code)									
No. of Lanes (Existing - Ultimate)	2-2	2-2	2-2	2-2					
Median (Existing - Ultimate)	U-U	U-U	U-U	U-U					
Degree of Access Control (Existing - Ultimate)	N-N	N-N	N-N	N-N					
Accident Data (Injuries - Fatalities)	5-0	3-1	4-2	7-2					
Traffic - a. Base Year (1972)	2,400	1,500	1,200	1,600		25-25	25-3		113-28
b. ADT Estimate Design Year (1995)	4,500	3,400	2,800	3,500					
c. DHV Estimate Design Year (1995)	590	440	340	450					
d. D Directional Distribution Factors	55	55	55	55					
e. T Percent Trucks (DHV)	07	07	07	07					
f. V/C Ratio (0.00)	0.15	0.12	0.09	0.18					
Work Classification					Estimated Cost (1,000 Dollars)				
1. Preliminary Engineering	16	103	115	120		856	132		988
2. Right-of-way									
a. Acquisition	12	71	62	69		924	138		1,062
b. Relocation						69			69
3. Grade & drain; minor structures	87	226	307	480		10,021	1,407		11,428
4. Subbase, base, surfacing, shoulders	96	478	576	467		1,232	1,054		2,286
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures		113				1,755			1,755
8. All other items	10	189	219	211		2,013	243		2,261
9. Subtotal, lines 3 to 8	193	1,006	1,102	1,158		21,121	2,709		23,830
10. Construction Engr. & contingencies 10% of Line 9	19	101	110	116		2,112	271		2,383
11. Total cost of construction Lines 9 and 10	212	1,107	1,212	1,274		23,233	2,980		26,213
12. Total Estimate cost, Lines 1,2 and 11	240	1,261	1,409	1,465		25,062	3,250		28,332



# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation - No Connection
- Railroad Grade Separation
- Combination Highway - R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Toll Bridge, Tunnel, Highway or Combination
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
**PRIORITY PRIMARY ROUTE A**  
**FAP ROUTE NUMBER 8**  
**DESIGNATED ROUTE**  
**US 12 & US 287**

Sheet 1 of 2 Sheets  
 Date DECEMBER 31, 1973



# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation-No Connection
- Railroad Grade Separation
- Combination Highway-R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Toll Bridge, Tunnel, Highway or Combination
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
**PRIORITY PRIMARY ROUTE A**  
**F.A.P. ROUTE NUMBER 8**  
**DESIGNATED ROUTE**  
**US 12 & US 287**



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652

Sheet 1 of 3 Sheets

STATE MontanaFAP Route No. 5Designated Route No. US 93  
(U.S. State or County)Route Letter BRoute Priority Ranking 02

Item	Estimate Sections								
	B - 1	B - 2	B - 3	B - 4	B - 5	B - 6	B - 7	B - 8	B - 9
Condition Code and Construction Schedule	3	3	3	3	3	3	3	3	1
Section Length, miles (0.1)	14.8	12.6	7.8	5.8	5.4	0.8	6.0	3.4	0.9
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R	R	R	R	R	R
Urban Area I.D. (Name and Code)									
No. of Lanes (Existing - Ultimate)	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4
Median (Existing - Ultimate)	U-D	U-D	U-D	U-D	U-D	U-U	U-D	U-D	U-D
Degree of Access Control (Existing - Ultimate)	N-P	N-P	N-P	N-P	N-P	N-N	N-P	N-P	N-P
Accident Data (Injuries - Fatalities)	38-10	27-8	15-4	17-0	10-6	5-0	12-6	7-0	3-0
Traffic - a. Base Year (1972)	3,000	3,100	2,700	3,100	3,600	3,700	3,500	3,600	3,600
b. ADT Estimate Design Year (1995)	6,600	6,800	5,900	6,700	7,900	8,200	7,800	8,000	8,000
c. DHV Estimate Design Year (1995)	990	1,020	890	1,010	1,190	1,230	1,090	1,120	1,120
d. D Directional Distribution Factors	55	55	55	55	55	55	55	55	55
e. T Percent Trucks (DHV)	11	11	09	09	09	09	06	06	06
f. V/C Ratio (0.00)	0.36	0.29	0.25	0.29	0.30	0.22	0.28	0.30	0.30
Work Classification									
1. Preliminary Engineering	520	336	212	188	107	15	119	87	
2. Right-of-way									
a. Acquisition	316	295	157	139	130	25	144	81	
b. Relocation									
3. Grade & drain; minor structures	3,062	1,678	1,033	1,082	461	183	513	297	
4. Subbase, base, surfacing, shoulders	1,476	1,435	811	850	437	221	487	392	
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures	390	78		196					
8. All other items	470	352	239	196			30	61	
9. Subtotal, lines 3 to 8	5,398	3,543	2,083	2,322	115	25	128	84	
10. Construction Engr. & contingencies 10% of Line 9	540	354	208	232	1,013	429	1,158	834	
11. Total cost of construction Lines 9 and 10	5,938	3,897	2,291	2,554	1,114	43	116	83	
12. Total Estimate cost, Lines 1, 2 and 11	6,774	4,528	2,660	2,886	1,351	512	1,537	1,085	



Table B - Basic Data by Estimate Sections

DM8 No. 04-R-5652  
Sheet 2 of 3 SheetsSTATE MontanaFAP Route No. 5Designated Route No. US 93  
(U.S. State or County)Route Letter BRoute Priority Ranking 02

Item	Estimate Sections								
	B - 10	B - 11	8 - 12	B - 13	B - 14	B - 15	8 - 16	B - 17	B - 18
Condition Code and Construction Schedule	3	3	3	0	0	2	2	3	3
Section Length, miles (0.1)	1.2	2.3	9.7	6.2	1.8	5.4	7.2	10.7	5.4
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R	R	R	R	R	R
Urban Area I.D. (Name and Code)									
No. of Lanes (Existing - Ultimate)	2-4	2-2	2-2	2-2	2-2	2-2	2-2	2-4	2-4
Median (Existing - Ultimate)	U-D	U-U	U-U	U-U	U-U	U-U	U-U	U-D	U-D
Degree of Access Control (Existing - Ultimate)	N-P	N-N	N-N	N-N	N-N	N-N	N-N	N-P	N-P
Accident Data (Injuries - Fatalities)	4-0	4-0	11-3	6-0	1-0	5-2	5-1	9-2	15-0
Traffic - a. Base Year (1972)	3,700	4,900	1,700	1,400	1,300	1,200	1,300	2,300	4,900
b. ADT Estimate Design Year (1995)	8,100	10,780	3,700	3,000	2,800	2,700	2,900	5,100	10,800
c. DHV Estimate Design Year (1995)	1,130	1,510	480	390	360	350	380	660	1,300
d. D Directional Distribution Factors	55	55	55	55	55	55	55	55	55
e. T Percent Trucks (DHV)	06	06	07	07	08	08	08	08	03
f. V/C Ratio (0.00)	0.40	0.30	0.15	0.14	0.10	0.17	0.17	0.30	0.39
Work Classification	Estimated Cost (1,000 Dollars)								
1. Preliminary Engineering	39	8	110					382	194
2. Right-of-way									
a. Acquisition	27	7	74				67	185	122
b. Relocation									
3. Grade & drain; minor structures	199	65	375			1,043	1,322	2,274	988
4. Subbase, base, surfacing, shoulders	138	152	485			672	766	1,043	710
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures						52			
8. All other items	38	10	218			164	192	383	172
9. Subtotal, lines 3 to 8	375	227	1,078			1,931	2,280	2,700	1,870
10. Construction Engr. & contingencies 10% of Line 9	38	23	108			193	228	370	187
11. Total cost of construction Lines 9 and 10	413	250	1,186			2,124	2,508	4,070	2,057
12. Total Estimate cost, Lines 1, 2 and 11	479	265	1,370			2,124	2,575	4,637	2,373



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 3 of 3 SheetsState MontanaFAP Route No. 5Designated Route No. US 93  
(U.S. State or County)Route Letter BRoute Priority Ranking 02

Item	Estimate Sections					Subtotal			Total for Route
	B-19	B-20				Rural	Small Urban	Urbanized	
Condition Code and Construction Schedule	3	3							
Section Length, miles (0.1)	2.0	1.1							
Class Rural, Small Urban or Urbanized (R, S, U)	S	S				100.9	3.1		114.0
Urban Area I, D (Name and Code)	0860 Kalispell	0860							
No. of Lanes (Existing Ultimate)	2-4	4-4							
Median (Existing Ultimate)	U-D	U-D							
Degree of Access Control (Existing Ultimate)	N-N	N-N							
Accident Data (Injuries Fatalities)	2-0	10-0							
Traffic a. Base Year (1972)	5,700	11,600				194-42	12-0		206-42
b. ADT Estimate Design Year (1995)	12,540	25,500							
c. DHV Estimate Design Year (1995)	1,380	2,800							
d. D Directional Distribution Factors	60	60							
e. T Percent Trucks (DHV)	05	05							
f. V/C Ratio (0.00)	0.25	0.60							
Work Classification									
1. Preliminary Engineering	50	10				Estimated Cost (1,000 Dollars)			
2. Right-of-way						2,317	68		2,385
a. Acquisition	81								
b. Relocation						1,709	61		1,850
3. Grade & drain; minor structures	593	12							
4. Subbase, base, surfacing, shoulders	615	102				14,575	605		15,180
5. Interchanges						10,075	117		10,792
6. Major Structures over 500'									
7. All other major structures									
8. All other items	164	5				807			807
9. Subtotal, lines 3 to 8	1,372	119				2,786	109		2,955
10. Construction Engr. & contingencies 10% of Line 9	137	12				28,243	1,491		29,734
11. Total cost of construction Lines 9 and 10	1,509	131				2,824	149		2,973
12. Total Estimate cost, Lines 1,2 and 11	1,640	149				31,067	1,640		32,707
						35,153	1,709		36,942



# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation-No Connection
- Railroad Grade Separation
- Combination Highway-R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Toll Bridge, Tunnel, Highway or Combination
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
**PRIORITY PRIMARY ROUTE B**  
F.A.P. ROUTE NUMBER 5  
DESIGNATED ROUTE  
US 93 MONT 200



# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation-No Connection
- Railroad Grade Separation
- Combination Highway-R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Toll Bridge, Tunnel, Highway or Combination
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
**PRIORITY PRIMARY ROUTE B**  
**F.A.P. ROUTE NUMBER 5**  
**DESIGNATED ROUTE**  
**US 93**

Sheet 2 of 2 Sheets  
 Date DECEMBER 31, 1973



Table B - Basic Data by Estimate Sections

OM8 No. 04-R-5652  
Sheet 1 of 2 SheetsSTATE MontanaFAP Route No. 7Designated Route No. US 93  
(U.S. State or County)Route Letter CRoute Priority Ranking 03

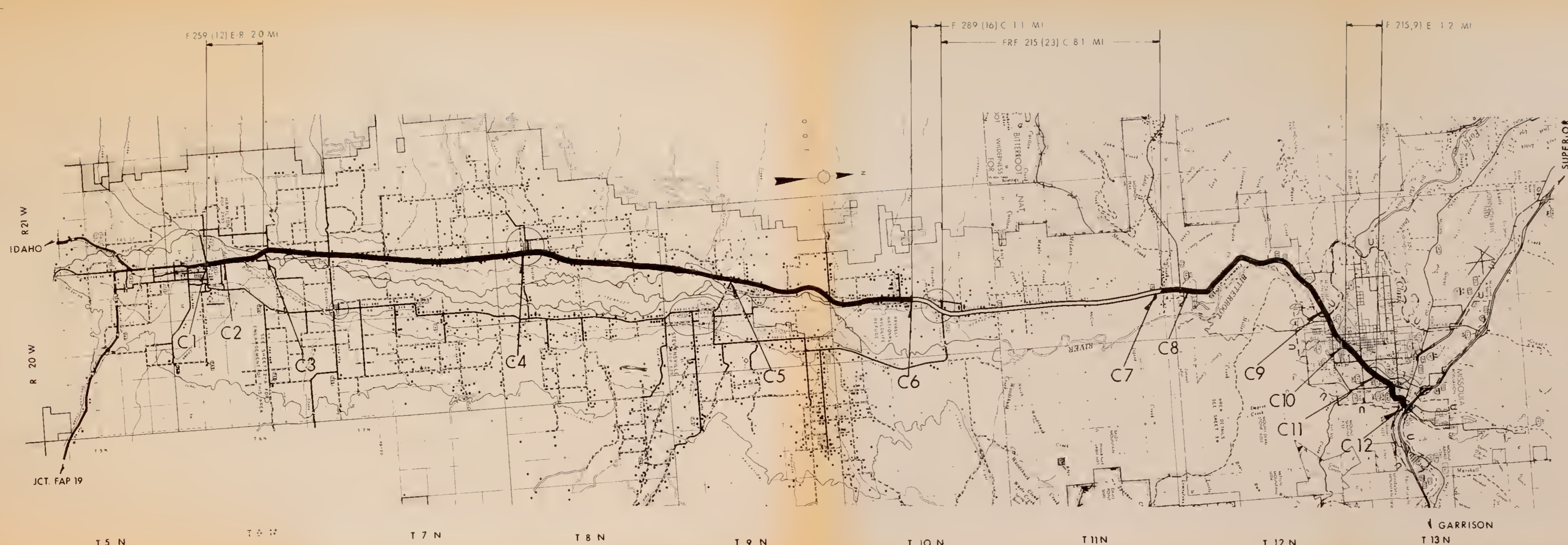
Item	Estimate Sections								
	C - 1	C - 2	C - 3	C - 4	C - 5	C - 6	C - 7	C - 8	C - 9
Condition Code and Construction Schedule	2	2	3	3	3	1	3	3	3
Section Length, miles (0.1)	0.7	1.3	9.7	7.7	6.7	9.2	0.5	6.8	1.3
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R	R	R	R	R	S
Urban Area I.D. (Name and Code)									MSLA-0830
No. of Lanes (Existing - Ultimate)	2-4	2-4	2-4	2-4	2-4	2-4	2-4	4-4	4-4
Median (Existing - Ultimate)	U-U	U-D	U-D	U-D	U-D	U-D	2-4	4-4	4-4
Degree of Access Control (Existing - Ultimate)	N-N	N-P	N-P	N-P	N-P	N-P	U-D	D-D	D-D
Accident Data (Injuries - Fatalities)	2-0	4-1	16-3	9-2	6-2		N-N	N-N	N-N
Traffic - a. Base Year (1972)	5,800	3,800	2,500	2,300	2,700	3,200	1-0	30-4	13-0
b. ADT Estimate Design Year (1995)	16,000	10,400	6,900	6,300	7,500	8,800	4,100	6,600	7,500
c. DHV Estimate Design Year (1995)	2,080	1,350	900	820	980	1,140	11,400	18,300	18,500
d. D Directional Distribution Factors	55	55	55	55	55	55	1,480	2,380	1,850
e. T Percent Trucks (DHV)	05	05	05	06	06	55	55	55	60
f. V/C Ratio (0.00)	0.86	0.30	0.20	0.18	0.21	06	06	06	05
Work Classification						0.37	0.18	0.17	0.15
1. Preliminary Engineering			378	243	124		13	41	5
2. Right-of-way									
a. Acquisition			233	184	163		16		
b. Relocation									
3. Grade & drain; minor structures	160	241	1,811	712	552				
4. Subbase, base, surfacing, shoulders	194	189	1,422	841	503		114	27	11
5. Interchanges							142	426	119
6. Major Structures over 500'									
7. All other major structures		52	1,099	547					
8. All other items	21	44	328	255	145		83		
9. Subtotal, lines 3 to 8	375	526	4,660	2,355	1,200		15	37	7
10. Construction Engr. & contingencies 10% of Line 9	38	53	466	236	120		35	49	14
11. Total cost of construction Lines 9 and 10	413	579	5,126	2,591	1,320		389	539	151
12. Total Estimate cost, Lines 1, 2 and 11	413	579	5,737	3,018	1,607		418	580	156



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 2 of 2 SheetsState MontanaFAP Route No. 7Designated Route No. US 93  
(U.S. State or County)Route Letter CRoute Priority Ranking 03

Item	Estimate Sections					Subtotal			Total for Route
	C - 10	C - 11	C - 12			Rural	Small Urban	Urbanized	
Condition Code and Construction Schedule	2	3	3						
Section Length, miles (0.1)	1.2	1.3	1.2			42.6	5.0		47.6
Class: Rural, Small Urban or Urbanized (R, S, U)	S	S	S						
Urban Area I. D. (Name and Code)	0830	0830	Ms1a-0830						
No. of Lanes (Existing - Ultimate)	4-4	4-4	4-4						
Median (Existing - Ultimate)	U-D	U-D	D-D						
Degree of Access Control (Existing - Ultimate)	N-P	N-P	N-P						
Accident Data (Injuries - Fatalities)	15-0	16-0	20-0			68-12	64-0		132-12
Traffic:									
a. Base Year (1972)	14,400	13,500	12,300						
b. ADT Estimate Design Year (1995)	28,400	26,600	24,200						
c. DHV Estimate Design Year (1995)	2,840	2,660	2,420						
d. D Directional Distribution Factors	60	60	60						
e. T Percent Trucks (DHV)	05	02	05						
f. V/C Ratio (0.00)	1.19	0.86	0.72						
Work Classification					Estimated Cost (1,000 Dollars)				
1. Preliminary Engineering		23	9			799	37		836
2. Right-of-way									
a. Acquisition	1,000	27	9			596	1,036		1,632
b. Relocation									
3. Grade & drain; minor structures	216	194	68			3,617	489		4,106
4. Subbase, base, surfacing, shoulders	320	271	175			3,717	885		4,602
5. Interchanges									
6. Major Structures over 500'			5				5		5
7. All other major structures						1,781			1,781
8. All other items	155	143	74			845	379		1,224
9. Subtotal, lines 3 to 8	691	608	322			9,960	1,758		11,718
10. Construction Engr. & contingencies 10% of Line 9	69	61	32			996	176		1,172
11. Total cost of construction Lines 9 and 10	760	669	354			10,956	1,934		12,890
12. Total Estimate cost, Lines 1,2 and 11	1,760	719	372			12,351	3,007		15,358



# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation - No Connection
- Railroad Grade Separation
- Combination Highway - R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
**PRIORITY PRIMARY ROUTE C**  
 FAP ROUTE NUMBER 7  
 DESIGNATED ROUTE  
 U S 93

Sheet 1 of 1 Sheers  
 Date DECEMBER 31, 1973

RAVALLI CO.

MISSOULA CO.

Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 1 of 2 SheetsSTATE MontanaFAP Route No. 20Designated Route No. Mont. 16  
(U.S. State or County)Route Letter DRoute Priority Ranking 04

Item	Estimate Sections								
	D - 1	D - 2	D - 3	D - 4	D - 5	D - 6	D - 7	D - 8	D - 9
Condition Code and Construction Schedule	0	0	0	0	3	3	2	1	2
Section Length, miles (0.1)	1.2	4.4	6.9	5.6	4.1	5.6	2.6	1.5	9.0
Class: Rural, Small Urban or Urbanized (R, S, U)	S	R	R	R	R	R	R	R	R
Urban Area I.D. (Name and Code)	Glendive-0500								
No. of Lanes (Existing - Ultimate)	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2
Median (Existing - Ultimate)	U-U	U-U	U-U	U-U	U-U	U-U	U-U	U-U	U-U
Degree of Access Control (Existing - Ultimate)	N-N	N-N	N-N	N-N	N-N	N-N	N-N	N-N	N-N
Accident Data (Injuries - Fatalities)	0-0	1-0	2-0	2-0	2-0	3-0	2-0		7-0
Traffic a. Base Year (1972)	1,300	1,300	900	700	800	900	1,200	1,200	1,200
b. ADT Estimate Design Year (1995)	2,600	2,600	1,900	1,700	1,700	1,900	2,600	2,600	2,600
c. DHV Estimate Design Year (1995)	340	340	250	220	220	250	340	340	340
d. D Directional Distribution Factors	55	55	55	55	55	55	55	55	55
e. T Percent Trucks (DHV)	06	06	15	15	15	15	15	15	15
f. V/C Ratio (0.00)	0.09	0.09	0.07	0.09	0.07	0.12	0.13	0.13	0.13
Work Classification									
Estimated Cost (1,000 Dollars)									
1. Preliminary Engineering					11	13			
2. Right-of-way									
a. Acquisition									
b. Relocation									66
3. Grade & drain; minor structures					4	6	203		700
4. Subbase, base, surfacing, shoulders					81	112	252		870
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures							108		108
8. All other items					8	12	45		156
9. Subtotal, lines 3 to 8					93	130	608		1,834
10. Construction Engr. & contingencies 10% of Line 9					9	13	61		183
11. Total cost of construction Lines 9 and 10					102	143	669		2,017
12. Total Estimate cost, Lines 1, 2 and 11					113	156	669		2,083



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 2 of 2 SheetsState MontanaFAP Route No. 2DDesignated Route No. Mont. 16  
(U.S. State or County)Route Letter DRoute Priority Ranking 04

Item	Estimate Sections					Subtotal			Total for Route
	D - 10	D - 11	D - 12			Rural	Small Urban	Urbanized	
Condition Code and Construction Schedule	0	0	3						
Section Length, miles (0.1)	3.0	1.7	0.7			50.3	1.2		51.5
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R	R						
Urban Area I. D. (Name and Code)									
No. of Lanes (Existing - Ultimate)	2-2	4-4	4-4						
Median (Existing - Ultimate)	U-U	D-D	U-U						
Degree of Access Control (Existing - Ultimate)	N-N	N-N	N-N						
Accident Data (Injuries - Fatalities)			6-0			25-0	0-0		25-0
Traffic - a. Base Year (1972)	1,440	3,200	6,400						
b. ADT Estimate Design Year (1995)	3,200	7,000	14,100						
c. DHV Estimate Design Year (1995)	420	910	1,830						
d. D Directional Distribution Factors	55	55	55						
e. T Percent Trucks (DHV)	15	15	05						
f. V/C Ratio (0.00)	0.24	0.15	0.36						
Work Classification					Estimated Cost (1,000 Dollars)				
1. Preliminary Engineering						24			24
2. Right-of-way									
a. Acquisition						66			66
b. Relocation									
3. Grade & drain; minor structures			7			920			920
4. Subbase, base, surfacing, shoulders			55			1,370			1,370
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures						216,208			216,208
8. All other items			2			223			223
9. Subtotal, lines 3 to 8			64			2,729			2,729
10. Construction Engr. & contingencies 10% of Line 9			6			273			273
11. Total cost of construction Lines 9 and 10			70			3,002			3,002
12. Total Estimate cost, Lines 1,2 and 11			70			3,092			3,092





# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation - No Connection
- Railroad Grade Separation
- Combination Highway - R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Toll Bridge, Tunnel, Highway or Combination
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
**PRIORITY PRIMARY ROUTE D**  
 F.A.P. ROUTE NUMBER 20  
 DESIGNATED ROUTE MONT. 16

Sheet 1 of 1 Sheets  
 Date DECEMBER 31, 1973



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 1 of 3 SheetsSTATE MontanaFAP Route No. 24Designated Route No. Mont. 200  
(U.S. State or County)Route Letter ERoute Priority Ranking 05

Item	Estimate Sections								
	E - 1	E - 2	E - 3	E - 4	E - 5	E - 6	E - 7	E - 8	E - 9
Condition Code and Construction Schedule	1	2	3	2	3	3	3	3	3
Section Length, miles (0.1)	1.6	4.0	2.6	8.8	6.3	9.2	11.3	12.5	9.8
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R	R	R	R	R	R
Urban Area I.D. (Name and Code)									
No. of Lanes (Existing - Ultimate)	2-2	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4
Median (Existing - Ultimate)	U-U	U-D	U-D	U-D	U-D	U-D	U-D	U-D	U-D
Degree of Access Control (Existing - Ultimate)	N-N	N-P	N-P	N-P	N-P	N-P	N-P	N-P	N-P
Accident Data (Injuries - Fatalities)		9-0	2-0	4-1	3-0	12-3	14-2	11-1	6-1
Traffic - a. Base Year (1972)	3,000	1,900	1,700	1,500	1,400	1,300	1,200	1,100	1,100
b. ADT Estimate Design Year (1995)	6,500	5,100	4,800	4,100	3,800	3,700	3,300	3,000	3,000
c. DHV Estimate Design Year (1995)	850	870	820	700	650	630	560	510	510
d. D Directional Distribution Factors	55	55	55	55	55	55	55	55	55
e. T Percent Trucks (DHV)	09	16	16	16	16	16	16	16	16
f. V/C Ratio (0.00)	0.33	0.79	0.27	0.57	0.21	0.49	0.21	0.21	0.21
Work Classification	Estimated Cost (1,000 Dollars)								
1. Preliminary Engineering			118	517	215	472	455	486	380
2. Right-of-way									
a. Acquisition		47	59	98	150	164	256	283	222
b. Relocation									
3. Grade & drain; minor structures		1,819	433	3,772	1,099	3,472	2,785	2,575	2,019
4. Subbase, base, surfacing, shoulders		729	300	1,512	760	1,473	1,509	1,587	1,245
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures		2,400	329	666		460	110	100	62
8. All other items		204	83	425	210	385	398	437	342
9. Subtotal, lines 3 to 8		5,152	1,145	6,375	2,069	5,790	4,802	4,699	3,668
10. Construction Engr. & contingencies 10% of Line 9		515	115	638	207	579	480	470	367
11. Total cost of construction Lines 9 and 10		5,667	1,260	7,013	2,276	6,369	5,282	5,169	4,035
12. Total Estimate cost, Lines 1, 2 and 11		5,714	1,437	7,628	2,641	7,005	5,993	5,938	4,637



Table B - Basic Data by Estimate Sections

OM8 No. 04-R-5652  
Sheet 2 of 3 SheetsSTATE MontanaFAP Route No. 24Designated Route No. Mont. 200  
(U.S. State or County)Route Letter ERoute Priority Ranking 05

Item	Estimate Sections								
	E - 10	E - 11	E - 12	E - 13	E - 14	E - 15	E - 16	E - 17	E - 18
Condition Code and Construction Schedule	3	3	3	3	3	3	3	3	3
Section Length, miles (0.1)	6.8	10.7	8.2	9.3	8.5	7.8	10.6	5.7	6.6
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R	R	R	R	R	R
Urban Area I.D. (Name and Code)									
No. of Lanes (Existing - Ultimate)	2-4	2-4	2-2	2-2	2-2	2-2	2-2	2-4	2-2
Median (Existing - Ultimate)	U-D	U-D	U-U	U-U	U-U	U-U	U-U	U-D	U-D
Degree of Access Control (Existing - Ultimate)	N-P	N-P	N-N	N-N	N-N	N-N	N-N	N-P	N-P
Accident Data (Injuries - Fatalities)	6-0	10-1	7-0	8-0	22-2	9-2	4-2	5-3	15-1
Traffic - a. Base Year (1972)	1,300	1,300	900	900	1,000	1,000	1,000	1,400	1,700
b. ADT Estimate Design Year (1995)	3,600	3,600	2,600	2,600	2,700	2,700	2,700	3,900	4,500
c. DHV Estimate Design Year (1995)	610	540	390	390	400	400	400	550	640
d. D Directional Distribution Factors	55	55	55	55	55	55	55	55	55
e. T Percent Trucks (DHV)	16	12	12	13	13	13	13	13	13
f. V/C Ratio (0.00)	0.27	0.18	0.18	0.16	0.16	0.16	0.16	0.12	0.15
Work Classification	Estimated Cost (1,000 Dollars)								
1. Preliminary Engineering	276	428	215	251	250	224	266	151	199
2. Right-of-way									
a. Acquisition	154	249	67	76	77	71	96	136	158
b. Relocation									
3. Grade & drain; minor structures	1,447	2,980	1,113	1,325	1,284	1,178	1,084	790	639
4. Subbase, base, surfacing, shoulders	875	1,582	655	759	828	760	1,206	933	898
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures	111	333	62	71	101	42	48		381
8. All other items	238	378	244	277	202	185	232	139	149
9. Subtotal, lines 3 to 8	2,671	5,273	2,074	2,432	2,415	2,165	2,570	1,862	2,067
10. Construction Engr. & contingencies 10% of Line 9	267	527	207	243	242	217	257	186	207
11. Total cost of construction Lines 9 and 10	2,938	5,800	2,281	2,675	2,657	2,382	2,827	2,048	2,274
12. Total Estimate cost, Lines 1, 2 and 11	3,368	6,477	2,563	3,002	2,984	2,677	3,189	2,335	2,631



Table B · Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 3 of 3 SheetsState MontanaFAP Route No. 24Designated Route No. Mont. 200  
(U.S. State or County)Route Letter ERoute Priority Ranking 05

Item	Estimate Sections					Subtotal			Total for Route
	E - 19	E - 20				Rural	Small Urban	Urbanized	
Condition Code and Construction Schedule	3	3							
Section Length, miles (0.1)	6.3	1.4				148.0			148.0
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R							
Urban Area I, D, (Name and Code)									
No. of Lanes (Existing - Ultimate)	2-4	2-4							
Median (Existing - Ultimate)	U-D	U-D							
Degree of Access Control (Existing - Ultimate)	N-P	N-P							
Accident Data (Injuries - Fatalities)	3-1	2-0				150-20			150-20
Traffic - a. Base Year (1972)	3,000	3,400							
b. ADT Estimate Design Year (1995)	7,500	8,300							
c. DHV Estimate Design Year (1995)	980	1,080							
d. D Directional Distribution Factors	55	55							
e. T Percent Trucks (DHV)	10	10							
f. V/C Ratio (0.00)	0.25	0.42							
Work Classification					Estimated Cost (1,000 Dollars)				
1. Preliminary Engineering	167	68				5,138			5,138
2. Right-of-way									
a. Acquisition	151	27				2,541			2,541
b. Relocation									
3. Grade & drain; minor structures	873	150				30,837			30,837
4. Subbase, base, surfacing, shoulders	1,031	165				18,807			18,807
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures		312				5,588			5,588
8. All other items	153	33				4,714			4,714
9. Subtotal, lines 3 to 8	2,057	660				59,946			59,946
10. Construction Engr. & contingencies 10% of Line 9	206	66				5,995			5,995
11. Total cost of construction Lines 9 and 10	2,263	726				65,941			65,941
12. Total Estimate cost, Lines 1,2 and 11	2,581	821				73,620			73,620



Table B - Basic Data by Estimate Sections

DMB No. 04-R-5652  
Sheet 1 of 5 SheetsSTATE MontanaFAP Route No. 15Designated Route No. U.S. 87  
(U.S. State or County)Route Letter FRoute Priority Ranking 06

Item	Estimate Sections								
	F-1	F-2	F-3	F-4	F-5	F-6	F-7	F-8	F-9
Condition Code and Construction Schedule	3	2	2	3	3	3	0	2	2
Section Length, miles (0.1)	1.1	4.3	7.0	7.8	3.6	5.4	16.6	11.3	8.6
Class: Rural, Small Urban or Urbanized (R, S, U)	U	U	R	R	R	R	R	R	R
Urban Area I.D. (Name and Code)	Gt. Falls 0530	Gt. Falls 0530							
No. of Lanes (Existing - Ultimate)	4-4	4-4	2-4	2-4	2-4	2-2	2-2	2-2	2-2
Median (Existing - Ultimate)	D-D	D-D	U-D	U-D	U-D	U-U	U-U	U-U	U-U
Degree of Access Control (Existing - Ultimate)	N-N	N-N	N-P	N-P	N-P	N-N	N-N	N-N	N-N
Accident Data (Injuries - Fatalities)	9-0	66-2	10-3	4-1	8-2	2-0	13-0	11-0	6-0
Traffic - a. Base Year (1972)	15,630	24,000	2,600	2,600	2,000	1,500	1,200	1,100	1,300
b. ADT Estimate Design Year (1995)	27,500	38,700	6,500	6,500	5,000	3,000	2,400	2,200	2,600
c. DHV Estimate Design Year (1995)	2,750	3,870	850	850	650	440	290	260	310
d. D Directional Distribution Factors	60	60	55	55	55	55	55	55	55
e. T Percent Trucks (DHV)	05	05	07	07	07	07	07	13	13
f. V/C Ratio (0.00)	0.48	0.40	0.39	0.31	0.24	0.14	0.13	0.13	0.13
Work Classification	Estimated Cost (1,000 Dollars)								
1. Preliminary Engineering	90			290	145	19			
2. Right-of-way									
a. Acquisition		5	189	188	82			94	78
b. Relocation									
3. Grade & drain; minor structures	5	60	1,757	1,964	854	7		857	821
4. Subbase, base, surfacing, shoulders	47	622	1,401	1,354	589	150		1,031	979
5. Interchanges									
6. Major Structures over 500'	2,384								
7. All other major structures			61		238			147	212
8. All other items	2	261	420	232	101	15		226	173
9. Subtotal, lines 3 to 8	2,438	943	3,639	3,550	1,782	172		2,261	2,185
10. Construction Engr. & contingencies 10% of Line 9	244	94	364	355	178	17		226	219
11. Total cost of construction Lines 9 and 10	2,682	1,037	4,003	3,905	1,960	189		2,487	2,404
12. Total Estimate cost, Lines 1, 2 and 11	2,772	1,042	4,192	4,383	2,187	208		2,581	2,482









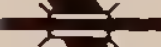








LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation-No Connection
- Railroad Grade Separation
- Combination Highway-R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Toll Bridge, Tunnel, Highway or Combination
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

MONTANA  
PRIORITY PRIMARY ROUTE E  
F.A.P. ROUTE NUMBER 24  
DESIGNATED ROUTE  
MONT. 200

# LEGEND FOR PRIORITY PRIMARY ROUTES

-  Location (with cost)
-  Location (zero cost)
-  Interchange
-  Highway Grade Separation-No Connection
-  Railroad Grade Separation
-  Combination Highway-R/R Grade Separation
-  Other Bridge
-  Tunnel
-  Safety Rest Area
-  TOLL
-  Frontage Road
-  Terminated Cross Road
-  Intersection At-Grade
-  Urban Area Boundary
-  Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
**PRIORITY PRIMARY ROUTE E**  
 F.A.P. ROUTE NUMBER 24  
 DESIGNATED ROUTE  
 MONT. 200

Sheet 2 of 3 Sheets  
 Date DECEMBER 31, 1973





# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation-No Connection
- Railroad Grade Separation
- Combination Highway-R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Toll Bridge, Tunnel, Highway or Combination
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
 PRIORITY PRIMARY ROUTE E  
 F.A.P. ROUTE NUMBER 24  
 DESIGNATED ROUTE  
 MONT. 200

Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 2 of 5 SheetsSTATE MontanaFAP Route No. 15Designated Route No. U.S. 87  
(U.S. State or County)Route Letter FRoute Priority Ranking 06

Item	Estimate Sections								
	F-10	F-11	F-12	F-13	F-14	F-15	F-16	F-17	F-18
Condition Code and Construction Schedule	2	2	3	3	3	3	3	3	3
Section Length, miles (0.1)	12.5	3.4	9.1	9.9	4.0	2.1	11.1	9.0	3
Class. Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R	R	S	R	R	R
Urban Area I.D. (Name and Code)						LWSTN - 0720			
No. of Lanes (Existing - Ultimate)	2-2	2-2	2-2						
Median (Existing - Ultimate)	U-U	U-U	U-U	2-2	2-2	2-2	2-2	2-2	2-2
Degree of Access Control (Existing - Ultimate)	N-N	N-N	N-N	U-U	U-U	U-U	U-U	U-U	U-U
Accident Data (Injuries - Fatalities)	11-3	3-0		N-N	N-N	N-N	N-N	N-N	N-N
Traffic - a. Base Year (1972)	1,200	1,300	10-1	10-0	6-1	3-0	9-1	4-0	3-2
b. ADT Estimate Design Year (1995)	2,400	2,600	1,400	1,400	1,800	4,000	300	700	700
c. DHV Estimate Design Year (1995)	290	310	320	320	3,600	7,900	1,600	1,400	1,400
d. D Directional Distribution Factors	55	55	55	55	430	950	210	180	180
e. T Percent Trucks (DHV)	12	12	12	37	55	55	55	55	55
f. V/C Ratio (0.00)	0.12	0.12	0.10	0.12	0.15	0.39	0.12	0.09	0.07
Work Classification									
1. Preliminary Engineering									
2. Right-of-way			30	127	21	6	155	105	144
a. Acquisition	114	31		90	20	9	92	82	87
b. Relocation									
3. Grade & drain; minor structures	1,064	222	12	267	56	67	488	292	223
4. Subbase, base, surfacing, shoulders	1,423	318	254	515	115	62	662	478	489
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures	130	106		260			32	49	519
8. All other items	216	59	26	187	38	13	309	197	166
9. Subtotal, lines 3 to 8	2,833	705	293	1,229	209	142	1,491	1,016	1,397
10. Construction Engr. & contingencies 10% of Line 9	283	71	29	123	21	14	149	102	140
11. Total cost of construction Lines 9 and 10	3,116	776	322	1,352	230	156	1,640	1,118	1,537
12. Total Estimate cost, Lines 1, 2 and 11	3,230	807	352	1,569	271	171	1,887	1,300	1,768



Table B - Basic Data by Estimate Sections

OM8 No. 04-R-5652  
Sheet 3 of 5 SheetsSTATE MontanaFAP Route No. 15Designated Route No. U.S. 87Route Letter FRoute Priority Ranking 06

(U.S. State or County)

Item	Estimate Sections								
	F-19	F-20	F-21	F-22	F-23	F-24	F-25	F-26	F-27
Condition Code and Construction Schedule	3	3	0	3	2	3	3	3	0
Section Length, miles (0.1)	6.5	5.0	11.9	8.6	6.0	6.2	1.4	2.8	8.1
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R	R	R	R	R	R
Urban Area I.D. (Name and Code)									
No. of Lanes (Existing - Ultimate)	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2
Median (Existing - Ultimate)	U-U	U-U	U-U	U-U	U-U	U-U	U-U	U-U	U-U
Degree of Access Control (Existing - Ultimate)	N-N	N-N	N-N	N-N	N-N	N-N	N-N	N-N	N-N
Accident Data (Injuries - Fatalities)	2-0	2-0	2-0	2-0	5-4	2-3	1-0	2-8	4-0
Traffic - a. Base Year (1972)	600	500	400	700	700	1,000	3,700	1,900	1,100
b. ADT Estimate Design Year (1995)	1,200	900	800	1,400	1,400	2,000	6,800	3,500	2,100
c. DHV Estimate Design Year (1995)	200	120	100	180	180	260	880	460	270
d. D Directional Distribution Factors	55	55	55	55	55	55	55	55	55
e. T Percent Trucks (DHV)	18	18	18	18	18	18	05	08	08
f. V/C Ratio (0.00)	0.08	0.07	0.06	0.12	0.12	0.14	0.31	0.21	0.09
Work Classification									
Estimated Cost (1,000 Dollars)									
1. Preliminary Engineering	37	36		116		56	10	107	
2. Right-of-way									
a. Acquisition	32	32		60		39	15	21	
b. Relocation									
3. Grade & drain; minor structures	48	68		394	577	140	117	269	
4. Subbase, base, surfacing, shoulders	206	174		497	598	271	178	319	
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures									
8. All other items	111	107		53	105			396	
9. Subtotal, lines 3 to 8	365	369		1,132	1,416	131	17	56	
10. Construction Engr. & contingencies 10% of Line 9	37	35		113	142	54	31	104	
11. Total cost of construction Lines 9 and 10	402	384		1,245	1,558	596	343	1,142	
12. Total Estimate cost, Lines 1, 2 and 11	471	452		1,421	1,558	691	368	1,270	



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652

Sheet 4 of 5 Sheets

STATE MontanaFAP Route No. 15Designated Route No. U.S. 87Route Letter FRoute Priority Ranking 06

(U.S. State or County)

Item	Estimate Sections								
	F-28	F-29	F-30	F-31	F-32	F-33	F-34	F-35	F-36
Condition Code and Construction Schedule	0	3	0	3	2	3	3	2	3
Section Length, miles (0.1)	8.5	6.3	1.7	9.7	7.0	1.1	2.0	0.4	1.3
Class: Rural, Small Urban or Urbanized (R, S, U)	R	R	R	R	R	U	U	U	U
Urban Area I.D. (Name and Code)						Billings0100	0100	0100	Billings0100
No. of Lanes (Existing - Ultimate)	2-2	2-2	2-2	2-2	2-2	2-4	4-4	2-4	2-4
Median (Existing - Ultimate)	U-U	U-U	U-U	U-U	U-U	U-D	D-D	U-D	U-D
Degree of Access Control (Existing - Ultimate)	N-N	N-N	N-N	N-N	N-N	N-P	N-N	N-P	N-P
Accident Data (Injuries - Fatalities)	7-1	1-4	1-0	9-0	8-2	10-0	6-0	3-0	8-0
Traffic - a. Base Year (1972)	1,000	1,000	1,000	1,000	1,200	8,900	17,000	9,600	9,200
b. ADT Estimate Design Year (1995)	2,100	2,100	2,100	2,100	2,300	17,600	33,000	26,400	21,000
c. DHV Estimate Design Year (1995)	270	270	270	270	300	1,940	3,630	2,900	2,310
d. D Directional Distribution Factors	55	55	55	55	55	60	60	60	60
e. T Percent Trucks (DHV)	08	08	08	08	08	05	05	05	05
f. V/C Ratio (0.00)	0.11	0.14	0.10	0.15	0.17	0.36	0.57	0.39	0.47
Work Classification									
Estimated Cost (1,000 Dollars)									
1. Preliminary Engineering		84		129		25	21		62
2. Right-of-way									
a. Acquisition		41		63		36	21		11
b. Relocation								15	
3. Grade & drain; minor structures		234		361	628	263	174	111	86
4. Subbase, base, surfacing, shoulders		323		500	660	282	335	133	121
5. Interchanges									
6. Major Structures over 500'									
7. All other major structures		120		37	335				1,459
8. All other items		137		212	208	136	91	59	45
9. Subtotal, lines 3 to 8		814		1,110	1,831	681	600	303	1,711
10. Construction Engr. & contingencies 10% of Line 9		81		111	183	68	60	30	172
11. Total cost of construction Lines 9 and 10		895		1,221	2,014	749	660	333	1,882
12. Total Estimate cost, Lines 1, 2 and 11		1,020		1,413	2,014	810	702	348	1,955



Table B - Basic Data by Estimate Sections

OMB No. 04-R-5652  
Sheet 2 of 5 SheetsState MontanaFAP Route No. 15816Designated Route No. U.S. 87  
(U.S. State or County)Route Letter FRoute Priority Ranking 06

Item	Estimate Sections					Subtotal			Total for Route
						Rural	Small Urban	Urbanized	
Condition Code and Construction Schedule									
Section Length, miles (0.1)						219.7	2.1	10.2	232.0
Class Rural, Small Urban or Urbanized (R, S, U)									
Urban Area I. D. (Name and Code)									
No. of Lanes (Existing - Ultimate)									
Mechanism (Existing - Ultimate)									
Degree of Access Control (Existing - Ultimate)									
Accident Data (Injuries - Fatalities)									
Traffic - a. Base Year (1972)						152-36	8-0	102-2	268-38
b. ADT Estimate Design Year (1995)									
c. DHV Estimate Design Year (1995)									
d. D Directional Distribution Factors									
e. T Percent Trucks (DHV)									
f. V/C Ratio (0.00)									
Work Classification						Estimated Cost (1,000 Dollars)			
1. Preliminary Engineering						1,611	6	198	1,815
2. Right-of-way									
a. Acquisition						1,450	9	88	1,547
b. Relocation									
3. Grade & drain; minor structures						11,721	67	699	12,487
4. Subbase, base, surfacing, shoulders						13,484	62	1,540	15,086
5. Interchanges									
6. Major Structures over 500'								3,843	3,843
7. All other major structures						2,798			2,798
8. All other items						3,668	13	594	4,275
9. Subtotal, lines 3 to 8						31,671	142	6,676	38,489
10. Construction Engr. & contingencies 10% of Line 9						3,167	14	668	3,849
11. Total cost of construction Lines 9 and 10						34,838	156	7,344	42,338
12. Total Estimate cost, Lines 1,2 and 11						37,899	171	7,630	45,700



LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation - No Connection
- Railroad Grade Separation
- Combination Highway - R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Franchise Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

MONTANA  
PRIORITY PRIMARY ROUTE F  
F.A.P. ROUTE NUMBER 15  
DESIGNATED ROUTE  
US 87

Sheet 1 of 4 Sheets  
Date DECEMBER 31, 1973



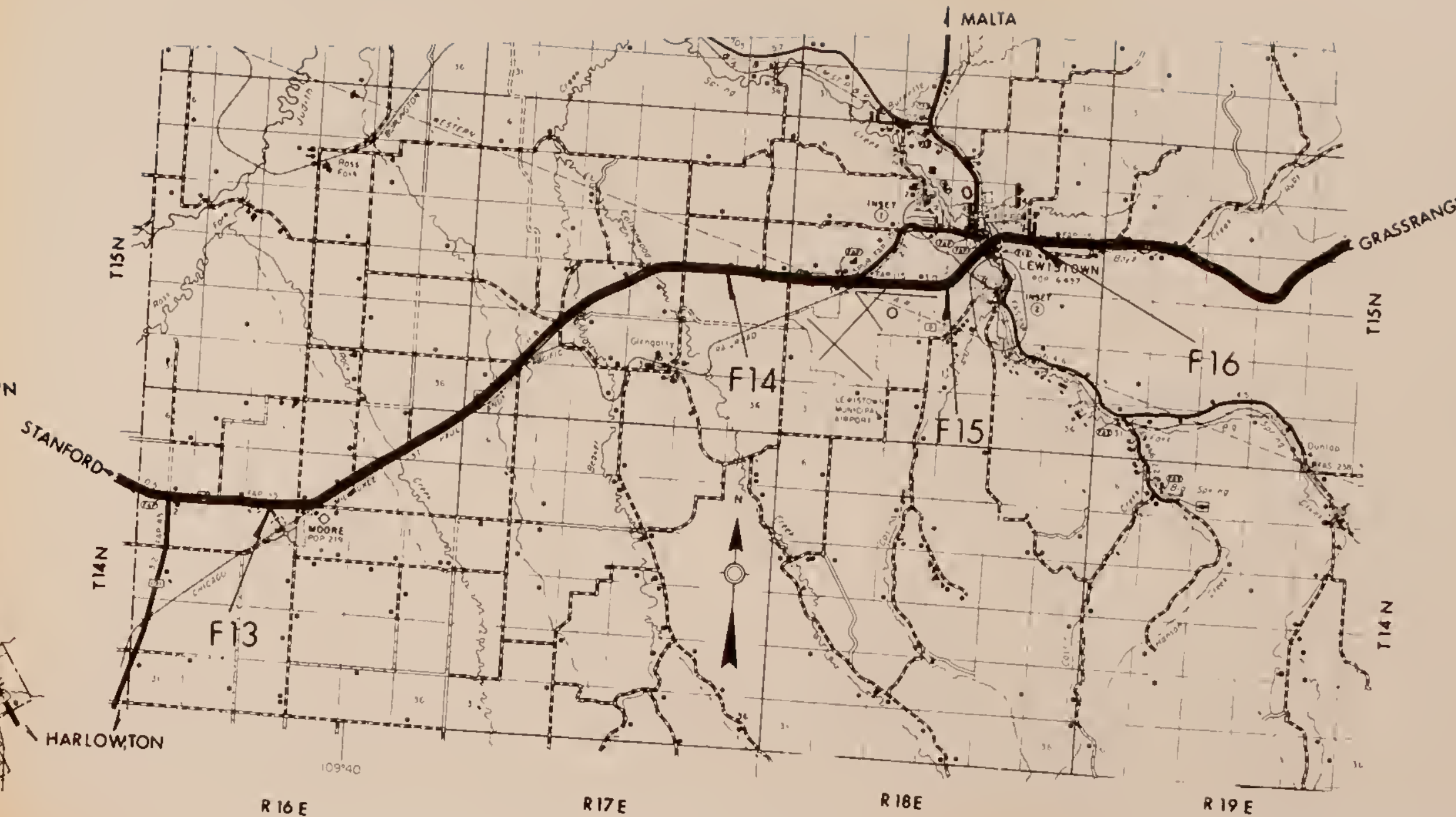
CASCADE CO.

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FERGUS CO.

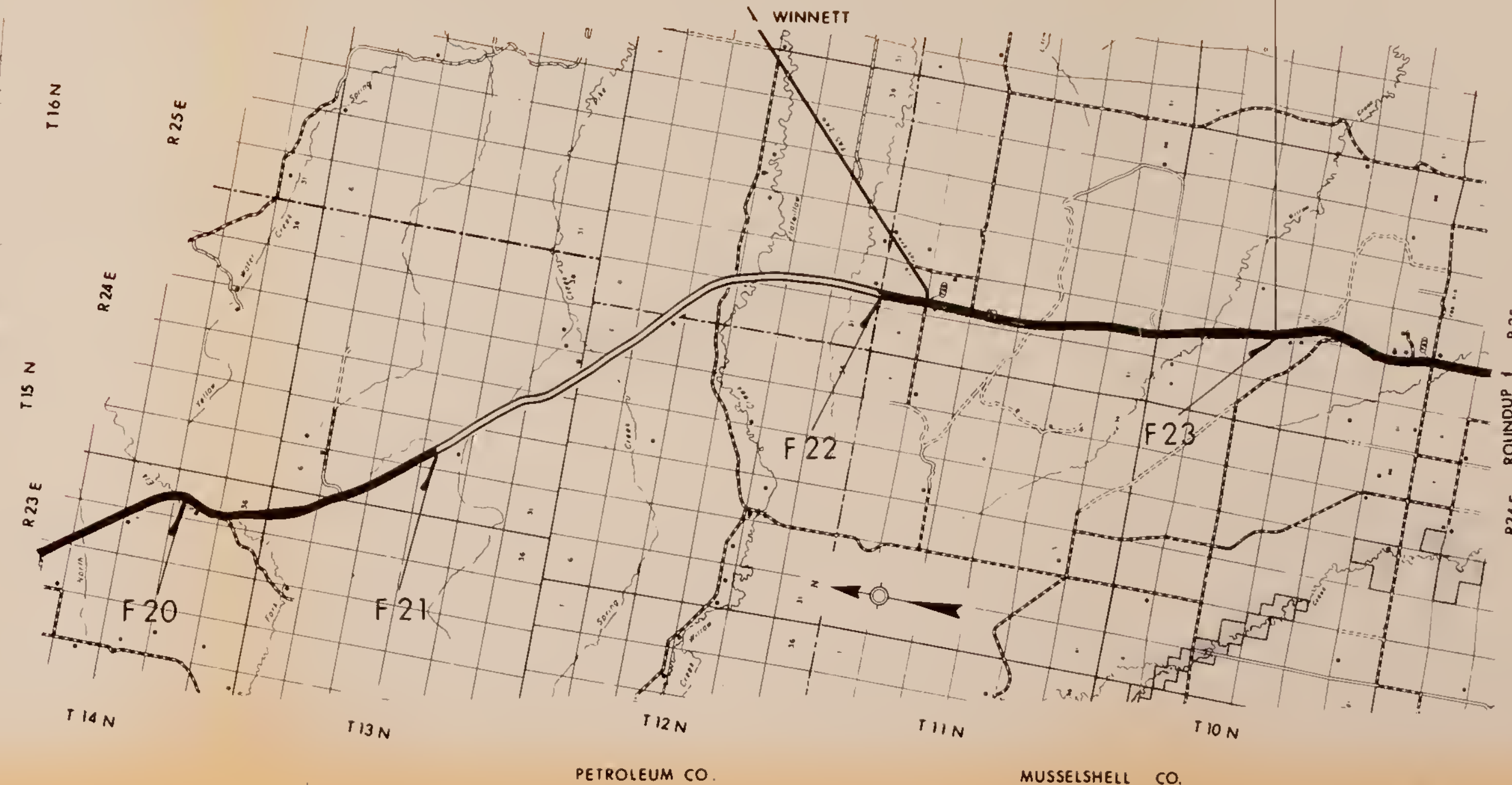
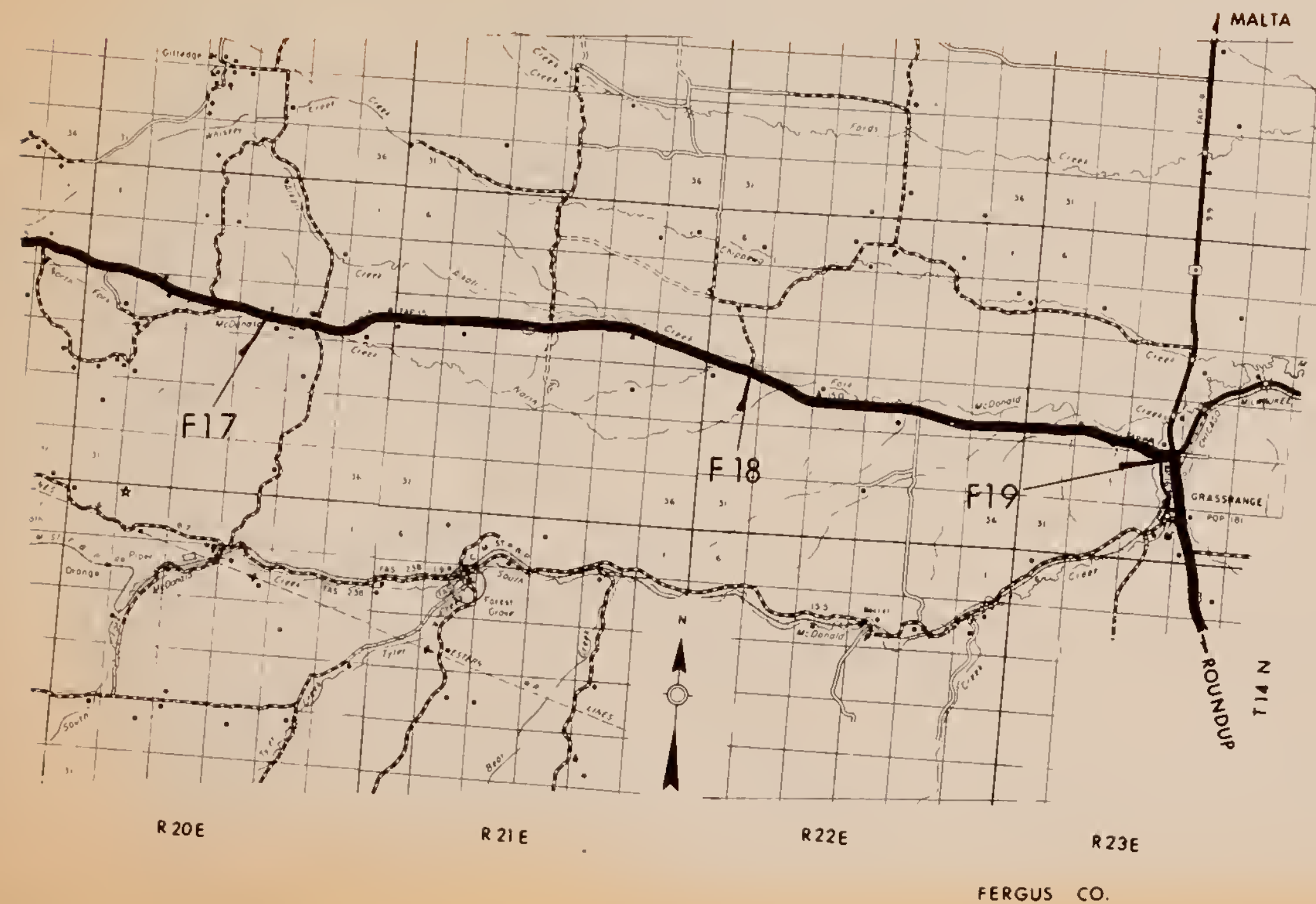
# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation-No Connection
- Railroad Grade Separation
- Combination Highway-R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
 PRIORITY PRIMARY ROUTE F  
 FAP ROUTE NUMBER 15  
 DESIGNATED ROUTE  
 US 87

Sheet 2 of 2 Sheets  
 Date DECEMBER 31, 1973



# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation-No Connection
- Railroad Grade Separation
- Combination Highway-R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Toll Bridge, Tunnel, Highway or Combination
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
 PRIORITY PRIMARY ROUTE F  
 F.A.P. ROUTE NUMBER 15 & 16  
 DESIGNATED ROUTE  
 US 87



# LEGEND FOR PRIORITY PRIMARY ROUTES

- Location (with cost)
- Location (zero cost)
- Interchange
- Highway Grade Separation - No Connection
- Railroad Grade Separation
- Combination Highway - R/R Grade Separation
- Other Bridge
- Tunnel
- Safety Rest Area
- TOLL
- Toll Bridge, Tunnel, Highway or Combination
- Frontage Road
- Terminated Cross Road
- Intersection At-Grade
- Urban Area Boundary
- Route Sections

SCALE 1 INCH = 2 MILES

**MONTANA**  
**PRIORITY PRIMARY ROUTE F**  
**FAP ROUTE NUMBER 16**  
**DESIGNATED ROUTE**  
**US 87**

Sheet 4 of 4 Sheets  
 Date DECEMBER 31, 1973

Table C - Cost Estimate by Routes and State Totals

OMB No. 04-R-5652

Sheet 1 of 2 Sheets

STATE MONTANA

Priority Primary Route Letter	A			B			C					
Federal-Aid Route Number(s)	8			5			7					
Designated Route Number(s)	U.S.12			U.S.93			U.S.93					
Route Priority Ranking	1			2			3					
Accident Data (Injuries - Fatalities)	113-28			206-42			132-12					
ADT (Route Average)	1,720			2,680			3,460					
Class: Rural, Small Urban and Urbanized	Rural	Small Urban	Urbanized	Rural	Small Urban	Urbanized	Rural	Small Urban	Urbanized	Rural	Small Urban	Urbanized
Length, Miles	101.1	7.7		108.9	3.1		42.6	5.0				
Work Classification												
Estimated Cost (1,000 Dollars)												
1. Preliminary Engineering	856	132		2,317	63		799	37				
2. Right-of-way												
a. Acquisition	924	138		1,769	81		596	1,036				
b. Relocation	69											
3. Grade & drain; minor structures	10,021	1,407		14,575	605		3,617	489				
4. Subbase, base, surfacing, shoulders	7,332	1,054		10,075	717		3,717	885				
5. Interchanges												
6. Major structures over 500'								5				
7. All other major structures	1,755			807			1,781					
8. All other items	2,013	248		2,786	169		845	379				
9. Subtotal, lines 3 to 8	21,121	2,709		28,243	1,491		9,960	1,758				
10. Construction Engr., & contingencies 10% of Line 9	2,112	271		2,824	149		996	176				
11. Total cost of construction Lines 9 and 10	23,233	2,980		31,067	1,640		10,956	1,934				
12. Total Estimate Cost, Lines 1, 2 and 11	25,082	3,250		35,153	1,789		12,351	3,007				
13. Route Total (Top 5% only)	28,332			36,942			15,358					
14. Route Total (Routes over 5%)												
15. Grand Total (Lines 12 and 14)												



Table C - Cost Estimate by Routes and State Totals

OMB No. 04-R-5652

Sheet 2 of 2 Sheets

STATE MONTANA

Priority Primary Route Letter	D			E			F			Subtotals			Totals
Federal-Aid Route Number(s)	20			24			15 & 16						
Designated Route Number(s)	Montana 16			Montana 200			U.S. 87						
Route Priority Ranking	4			5			6						
Accident Data (Injuries - Fatalities)	25-0			150-20			268-38						
ADT (Route Average)	1,170			1,300			1,476						
Class: Rural, Small Urban and Urbanized	Rural	Small Urban	Urbanized	Rural	Small Urban	Urbanized	Rural	Small Urban	Urbanized	Rural	Small Urban	Urbanized	
Length, Miles	50.3	1.2		148.0			219.7	2.1	10.2	670.6	19.1	10.2	699.9
Work Classification													
Estimated Cost (1,000 Dollars)													
1. Preliminary Engineering	24			5,138			1,611	6	198	10,745	243	198	11,186
2. Right-of-way													
a. Acquisition	66			2,541			1,450	9	88	7,346	1,264	88	8,698
b. Relocation										69			69
3. Grade & drain; minor structures	920			30,837			11,721	67	699	71,691	2,568	699	74,958
4. Subbase, base, surfacing, shoulders	1,370			18,807			13,484	62	1,540	54,785	2,718	1,540	59,043
5. Interchanges													
6. Major structures over 500'									3,843		5	3,843	3,848
7. All other major structures	216			5,588			2,798			12,945			12,945
8. All other items	223			4,714			3,668	13	594	14,249	809	594	15,652
9. Subtotal, lines 3 to 8	2,729			59,946			31,671	142	6,676	153,670	6,100	6,676	166,446
10. Construction Engr., & contingencies 10% of Line 9	273			5,995			3,167	14	668	15,367	610	668	16,645
11. Total cost of construction Lines 9 and 10	3,002			65,941			34,838	156	7,344	169,037	6,710	7,344	183,091
12. Total Estimate Cost, Lines 1, 2 and 11	3,092			73,620			37,899	171	7,630	187,197	8,217	7,630	203,044
13. Route Total (Top 5% only)													80,632
14. Route Total (Routes over 5%)	3,092			73,620			37,899	171	7,630				122,412
15. Grand Total (Lines 12 and 14)										187,197	8,217	7,630	203,044

Table C - Cost Estimate by Routes and State Totals

OMB No. 04-R-5652

Sheet 2 of 2 Sheets

STATE MONTANA

Priority Primary Route Letter	D			E			F			Subtotals			Totals
Federal-Aid Route Number(s)	20			24			15 & 16						
Designated Route Number(s)	Montana 16			Montana 200			U.S. 27						
Route Priority Ranking	4			5			6						
Accident Data (Injuries - Fatalities)	25-0			150-20			268-38						
ADT (Route Average)	1,170			1,300			1,476						
Class: Rural, Small Urban and Urbanized	Rural	Small Urban	Urbanized	Rural	Small Urban	Urbanized	Rural	Small Urban	Urbanized	Rural	Small Urban	Urbanized	
Length, Miles	50.3	1.2		148.0			219.7	2.1	10.2	670.6	19.1	10.2	699.9
Work Classification													
Estimated Cost (1,000 Dollars)													
1. Preliminary Engineering	24			5,138			1,611	6	198	10,745	243	198	11,186
2. Right-of-way													
a. Acquisition	66			2,541			1,450	9	88	7,346	1,264	88	8,698
b. Relocation													
3. Grade & drain; minor structures	920			30,837			11,721	67	699	71,691	2,568	699	74,958
4. Subbase, base, surfacing, shoulders	1,370			18,807			13,484	62	1,540	54,785	2,718	1,540	59,043
5. Interchanges													
6. Major structures over 500'													
7. All other major structures	216			5,588			2,798		3,843		5	3,843	3,848
8. All other items	223			4,714			3,668	13	594	14,249	809	594	15,652
9. Subtotal, lines 3 to 8	2,729			59,946			31,671	142	6,676	153,670	6,100	6,676	166,446
10. Construction Engr., & contingencies 10% of Line 9	273			5,995			3,167	14	668	15,367	610	668	16,645
11. Total cost of construction Lines 9 and 10	3,002			65,941			34,838	156	7,344	169,037	6,710	7,344	183,091
12. Total Estimate Cost, Lines 1, 2 and 11	3,092			73,620			37,899	171	7,630	187,197	8,217	7,630	203,044
13. Route Total (Top 5% only)													
14. Route Total (Routes over 5%)	3,092			73,620			37,899	171	7,630				80,632
15. Grand Total (Lines 12 and 14)										187,197	8,217	7,630	203,044







